

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )  
 )  
Replacement of Part 90 by Part 88 to )  
Revise the Private Land Mobile Radio )  
Services and Modify the Policies )  
Governing Them )  
 )  
and )  
 )  
Examination of Exclusivity and )  
Frequency Assignment Policies of )  
the Private Land Mobile Radio Services )

PR Docket No. 92-235

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Federal Communications Commission  
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To: The Commission

ARINC COMMENTS ON ITA'S EX PARTE STATEMENT

Aeronautical Radio, Inc. (ARINC), by its attorneys, in response to the Commission's public notice,<sup>1</sup> hereby submits its comments on the ex parte statement of the Industrial Telecommunications Association, Inc. (ITA), dated January 21, 1997 ("ITA Ex Parte").

ARINC and the air transport industry have been active participants in the Commission's rulemaking evaluating methods to utilize land mobile frequencies below 800 MHz more efficiently. ARINC and its Aeronautical Frequency Committee (AFC) have demonstrated the importance of the air transport industry's low powered operations on or near the nation's commercial airports to safety, efficiency, and operational effectiveness of air carrier operations.<sup>2</sup>

<sup>1</sup> Public Notice (DA 97-206), released January 28, 1997.

<sup>2</sup> See SkyComm, Inc., Private Land Mobile Communications Requirements of Passenger  
(Continued...)

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More than 500 million commercial passengers and millions of tons of cargo pass through our nation's airports every year. The airlines use land mobile communications at the airports to ensure the safety and security of these passengers, as well as the millions of airline and support agency employees on the airports, and to speed these air travelers safely and efficiently to their destinations.

Aviation's interest in this proceeding focuses on the frequency pairs that the Commission has assigned for aviation terminal use (ATU)<sup>3</sup>, and on aviation's need for additional low power channels over and beyond these ATU channels. ITA's Ex Parte seems to address both of these needs in a positive and useful manner, although there appear to be a few mistakes in the ITA proposal. ARINC and the air transport industry generally support the direction and substance of the plan. The Commission should adopt something close to this plan with the modifications set out below.

#### **ATU Channels (ITA Limitation 28)**

ITA recognizes the continuing need for ATU channels, but its proposed rules (Limitation 28) do not meet all of the needs of aviation. The omissions appear, however, to be unintentional. ARINC and the AFC suggest that the ITA proposal be modified to preserve the following features in the present rules:

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(...Continued)  
and Freight Air Carriers at Airports (Sept. 30, 1996).

<sup>3</sup> The ATU channels are those frequency pairs in the 450-470 MHz band subject to the conditions set out in Note 25 to the frequency table in 47 C.F.R. §90.75(b).

1. Retain the current 50-mile separation for full power, co-channel base stations from the airports, and a 10-mile separation for low power 2-watt industrial complex operations;
2. Retain a maximum power of 20 watts base and 3 watts mobile for ATU operations; and
3. Provide for common frequency repeaters (signal boosters) on ATU channels.

First, ITA properly concludes that:

In recognition of the extensive communications capability required to supply and service airline carriers, the blueprint preserves the existing prohibition on non-airline use of the 40 designated frequency pairs within 50 miles of the specified localities.<sup>4</sup>

The proposed Limitation 28, however, does not include the level of protection that ITA agrees to be required. ITA's Limitation 28 does not include the language of Section 90.75(c)(25) that prohibits full-power non-aviation use within 50 miles of the airport. Non-airline base stations operating at powers greater than 2 watts should be kept 50 miles or more from the airports to avoid interference to the ATU systems.<sup>5</sup> Low power, 2-watt operation by non-ATU systems may be permitted at distances of 10 miles or more from the airport.<sup>6</sup> When the Commission reduced the distance from 75 miles to 50 miles, with ARINC's support, the agency agreed with the National Association of Business and Educational Radio (NABER) that additional protection

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<sup>4</sup> ITA Ex Parte at 6.

<sup>5</sup> See 47 C.F.R. §90.75(c)(25)(vii).

<sup>6</sup> See *id.*

was needed to prevent interference to airport operation than just a mileage separation.<sup>7</sup> With full power base stations only 50 miles off the airport, the associated high-power mobiles could actually be in the vicinity of the airport, and the base station could, under some conditions, be heard on the airport. Accordingly, the FCC provided that, in addition to the mileage separation, non-ATU “stations may operate only on a non-interference basis to the co-channel facilities of air carriers located on or near airports specified below.”<sup>8</sup> A similar provision should be retained in any revision to these rules.

Second, the ITA proposal would require the airlines to reduce the power of their current operations, which are already low, to an even lower power. As written, ITA’s Limitation 28 would limit ATU base stations to 3 watts, and its Limitation 34 would limit ATU mobiles to only 2 watts. Currently, the rules permit airlines to operate 20-watt base stations<sup>9</sup> and 3-watt mobiles.<sup>10</sup> These slightly higher powers are necessary to obtain airport coverage, even with the use of common frequency repeaters. The current power limits of 20 watts base and 3 watts mobile should be retained in the new rules.

Third, Limitation 28 also omits the current provisions for common frequency repeaters or signal boosters.<sup>11</sup> Aviation has engineered systems on airports to use the lowest power practicable, but in order to obtain adequate coverage, it has been necessary to establish common

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<sup>7</sup> See Business Radio Service (PR Docket No. 85-273), 60 R.R.2d 379, 381 (1986).

<sup>8</sup> *Id.*

<sup>9</sup> 47 C.F.R. §90.75(c)(15).

<sup>10</sup> 47 C.F.R. §90.75(c)(31).

<sup>11</sup> 47 C.F.R. §90.75(c)(25).

frequency repeaters operating at 500 milliwatts or less to provide fill-in where buildings or terrain cause shadowing or in parts of the terminals where radio penetration is inadequate. Using these techniques, aviation has been able to reuse ATU frequencies at multiple airports within a given metropolitan area.

Instead of the simplified Limitation 28 contained in the ITA Ex Parte, ARINC and the aviation community recommend that the current Note 25 in Section 90.75(c) be retained, supplemented to specify 20-watt maximum operation on the base stations. Limitation 34 should be supplemented with the substance of Note 31 in Section 90.75(c) to permit 3-watt mobile units.

One other minor problem is also shown in the frequency table in the ITA Ex Parte.<sup>12</sup> The ATU frequency 465.6500 MHz is shown with ITA's Limitation 15, which would grandfather public safety use of this frequency. Public safety is not currently permitted to use this channel and thus need not be grandfathered.

In order to correct these omissions, ARINC suggests that:

1. ITA's Limitation 28 be modified to include the current language of Section 90.75(c)(25) of the Rules.
2. An additional Limitation be imposed on all frequencies in the band 460.6500-460.89375 MHz incorporating the language of Section 90.75(c)(15) of the Rules to permit ATU systems to operate 20-watt base stations.
3. An additional Limitation be imposed on all frequencies in the band 465.6500-465.89375 MHz incorporating the language of Section 90.75(c)(31) to permit ATU systems to operate 3-watt mobiles.

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<sup>12</sup> See ITA Ex Parte at A-97.

4. ITA's Limitation 15 be deleted as to 465.6500 MHz.

#### **Service Pools**

ARINC and the industry do not object to ITA's proposal to reduce the service pools to two, although a single pool would also be reasonable. There is a minor problem, however, in the proposed definition of "Private Wireless." The definition does not appear explicitly to include air carriers.<sup>13</sup> Because it names rail and motor carriers, it should also recognize air carriers. The definition should be amended to read "entities engaged in commercial transportation of persons and goods by air, rail and motorized vehicles . . ." [new language underscored].

#### **Low Power Channels**

Finally, aviation has been utilizing low power operation on 12.5 kHz split channels to supplement its ATU operations. ARINC and the air transport industry support the proposal to create 75 channel pairs for low power operation, but suggest that the proposed split between the two types of operation (50 permanent or coordinated and 25 itinerant or uncoordinated) be reexamined to increase the number of coordinated assignments.

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<sup>13</sup>

ITA Ex Parte at 4.


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ARINC and the AFC are encouraged by the proposal of ITA and hope that it will lead to a prompt conclusion to these proceedings. The Commission and the land mobile community have made significant and commendable progress in a very difficult problem of refarming heavily used spectrum. With the adjustments suggested in these comments, ARINC and the AFC urge the Commission to adopt the proposals offered by ITA.

Respectfully submitted,

AERONAUTICAL RADIO, INC.

By:

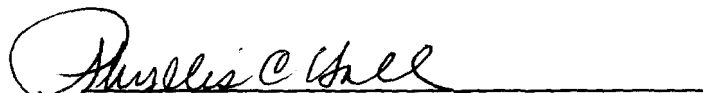
  
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February 7, 1997

CERTIFICATE OF SERVICE

I hereby certify that on this 7th day of February, 1997, I caused copies of the foregoing  
ARINC Comments on ITA's Ex Parte Statement to be mailed via first-class postage prepaid mail  
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